BULLET BACKGROUND PAPER ON HYDROSTATIC TEST REQUIREMENTS FOR TRUCK MOUNTED DRY CHEMICAL TANKS

PURPOSE

- -The purpose of this background paper is to provide policy guideline for hydrostatic testing of the dry chemical tank on truck mounted fire suppression systems.
- -This paper does NOT affect hand held dry chemical fire extinguishers or facility installed suppression systems.

BACKGROUND

- -Multiple questions have been presented to 542 CSW/SEVG-GBZVS regarding hydrostatic testing on large dry chemical tanks. The technical orders associated with these vehicles suggest mandatory testing within the first twelve years of service.
- -Most bases do not have equipment or facilities needed to test the tanks.

DISCUSSION

- -According to NFPA 17, all large dry chemical tanks exceeding a 150 lb capacity are not required to undergo hydrostatic testing.
- NFPA 17: Standard for Dry Chemical Extinguishing Systems 2002 Edition
 - 11.5.1* The following parts of dry chemical extinguishing systems shall be subjected to a hydrostatic pressure test at intervals not exceeding 12 years:
 - (1) Dry chemical containers
 - (2) Auxiliary pressure containers
 - (3) Hose assemblies
 - Exception No. 1: Dry chemical containers that are part of extinguishing systems having an agent capacity exceeding 150 lb (68 kg).
 - Exception No. 2: Auxiliary pressure containers not exceeding 2 in. (0.05 m) outside diameter and less than 2 ft (0.6 m) in length.
 - Exception No. 3: Auxiliary pressure containers bearing the DOT "3E" marking.
- -Likewise, the Department of Transportation, Code of Federal Regulations (CFR) recommends this testing only if a defect is found that can potentially affect the safety of the vehicle.

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(3) No pressure vessel need be hydrostatically tested except when a defect is found that, in the marine inspector's opinion, may affect the safety of the pressure vessel. In this case, the pressure vessel should be hydrostatically tested at a pressure of 1 ½ times the maximum allowable working pressure.

SUMMARY

- -POLICY GUIDANCE IS EFFECTIVE 1 JANUARY 2006:
- -HQ AFCESA/CEXF and 542 CSW/SEVG-GBZVS engineering recommend all vehicle mounted dry chemical tanks greater than a 150 lb capacity be exempt from hydrostatic testing unless otherwise specified.
- -End item technical orders will be updated to reflect this policy guidance. Note, however, that it may take up to one year for publication and release of the changes and supplements to existing technical orders.

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